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APRIL 1986

ESTIMATED U.S. PETROLEUM BALANCE

SUMMARY

Total domestic products delivered rose 3.2 percent (488 thousand B/D) in April and 2.4 percent for the year to date—both higher than the 1.2 percent rate during the last half of 1985. Light products' growth rates dropped from March, with distillate fuel oil actually showing a small decline versus last year. In contrast, residual fuel oil deliveries rose strongly. The reversal in distillate and the lower growth rates for other light products suggest that at least part of March's strong showing was due to movements in nonprimary inventories. Nevertheless, lower prices appear to be increasing deliveries this year—year-to-date growth for all major fuels except distillate exceeds that of 1985's last half, as shown in the table below. If distillate deliveries are adjusted for weather, the growth rate so far this year also exceeds that of the prior six months by about 3 percentage points.

YEAR-TO-YEAR GROWTH RATES, MAJOR PRODUCTS

	1986 January-April	1985 Second Half
Motor gasoline	2.6%	1.8%
Distillate	1.7	2.4
Residual fuel oil	4.4	(5.6)
Kerosine jet fuel	8.6	4.0
Total domestic deliveries	2.4	1.2

Estimated crude oil production, though based on preliminary information as noted last month, shows a 1.9 percent (168 thousand B/D) decline from last April. The effect of lower crude oil prices was apparent in lower 48 production, which since January has fallen an estimated 120 thousand B/D. A decline in product imports partly offset a rise in imports of crude oil, resulting in a net 4.8 percent (247 thousand B/D) import increase. Refineries operated at the highest April rate since 1979.

PRODUCTS SUPPLIED^{1/}

Gasoline

LOWER PRICES

ADD TO CONSUMPTION.

Gasoline supplied rose 2.8 percent over last April, a rate of increase well below March's 6 percent but still showing a gain compared to the 1.8 percent growth rate for the last half of 1985.

Retail gasoline prices again fell for the month, bringing the decline since December to about 25 cents per gallon. After adjusting for inflation, April's price levels were only a little more than half of what they were in March 1981. About one-third of that five-year decline has taken place in the most recent four months. Indeed, we estimate that the recent drop in prices has already added 1 to 2 percentage points to the growth rate of gasoline demand.

Distillates

SLIGHT DECLINE

VERSUS LAST APRIL.

After rising strongly year-to-year in February and March, distillate deliveries in April dropped slightly compared with last April. As with gasoline deliveries, this tends to suggest that March's unusually high, 10 percent increase was in large part due to movements in nonprimary storage.

Weakness in truck traffic, combined with rail traffic showing no change from last April, account for distillate's April decline.

Residual Fuel Oil

STRONG INCREASE TIED TO UTILITY AND INDUSTRIAL USE.

Residual fuel oil's 17.4 percent, nearly-200 thousand B/D increase in April was the third of the past 5 months and contrasts with the 13 percent average decline for 1985. Fuel switching from natural gas has apparently been continuing. Purchases by electric utilities have risen year-to-year in almost every month from October through February, the latest data available. Despite warmer weather in February, utilities burned about 10 thousand B/D more residual fuel oil than in the previous February. Additional purchases have increased inventories at a time of the year when utility inventories typically decline. Increases in both utility and industrial purchases appear to account for April's deliveries increase.

Kerosine Jet Fuel

UP 3 PERCENT FOR APRIL.

Kerosine jet fuel deliveries rose 3.2 percent in April. Though this increase is lower than in recent months, figures for the year to date still show a healthy 8.6 percent increase—in line with the growth in revenue miles flown.

Other Oils

DELIVERIES INCREASE NEARLY 5 PERCENT.

Deliveries of other oils rose nearly 5 percent (174 thousand B/D) in April. Continued growth in petrochemical use and increases in refinery gas production and consumption—due to the large increase in refinery operations—appear to account for much of the increase. Meanwhile, demand for liquefied petroleum gases appears to have weakened. Deliveries for the first two months of 1986 were down about 8 percent.

(In millions of B/D)	APRIL ESTIMATES			YEAR-TO-DATE ESTIMATES		
	1986	1985	% Change	1986	1985	% Change
—Total domestic products supplied	15.8	15.3	3.2	16.1	15.7	2.4
—Motor gasoline supplied	7.1	6.9	2.8	6.8	6.6	2.6
—Distillate fuel oil supplied	2.8	2.8	(0.4)	3.2	3.1	1.7
—Residual fuel oil supplied	1.3	1.1	17.4	1.4	1.3	4.4

SUPPLY^{1/}

Total supply rose 40 thousand B/D over last year, the result of a 247 thousand B/D increase in imports largely offset by a 207 thousand B/D decline in domestic supply.

Production

LOWER 48 PRODUCTION DOWN 120 THOUSAND B/D FROM JANUARY.

January's level.

Crude production fell 1.9 percent (168 thousand B/D) in April, in part a reflection of the recent decline in crude oil prices. Alaskan production increased about 40 thousand B/D over last April, though it has declined from levels earlier in the year; lower 48 production is estimated to have fallen more than 200 thousand B/D year-to-year. As an indicator of the impact of lower crude oil prices, April production in the lower 48 was down roughly 120 thousand B/D from

The response of crude oil production to industry economic conditions is not a new phenomenon. Crude production in the lower 48 declined roughly 300 thousand B/D per year during the price-controlled 1970s, though the decline was mitigated in the late 1970s by increased Alaskan production. After full decontrol in early 1981, U.S. production held steady or even increased somewhat until the first part of this year. Since January, estimated U.S. production has fallen each month.

Imports

UP ABOUT 250 THOUSAND B/D.

A 408 thousand B/D increase in crude oil imports was partially offset by a 161 thousand B/D decline in product imports, for a net 4.8 percent, 247 thousand B/D, increase. Crude oil imports increased about 700 thousand B/D from the levels of February and March as refinery operations rose. Product imports were down versus last year because of lower gasoline and distillate imports. Residual fuel oil imports, on the other hand, rose about 100 thousand B/D, following year-to-year increases in four of the previous six months. The recent increases contrast with an import decline averaging 170 thousand B/D in 1985.

Inventories

GASOLINE DOWN, DISTILLATES UP SLIGHTLY.

Total inventories declined 6 million barrels in April, with declines of 3 million and 14 million barrels, respectively, for crude oil and gasoline partially offset by a small increase for distillate and a 6 million barrel increase for other oils. Though the decline in gasoline stocks was somewhat larger than the April average of the past decade, declines in that month are typical.

The small rise in distillates, however, was contrary to typical seasonal patterns. Though gasoline inventories at the end of April were lower than for the same month in recent previous years, the supply situation appears adequate, especially in view of the relatively minor role inventories have played in meeting peak-season demand. In fact, in three of the past four years, gasoline stocks have actually risen from the end of May to the end of August.

Operations

HIGHEST APRIL RATE SINCE 1979.

With input to distillation units rising roughly 750 thousand B/D from March levels, refineries utilized over 81 percent of operable capacity in April, returning to the 4 to 5 point year-to-year gains typical since December. April's rate was the highest for that month since 1979. If

capacity that is operable but not operating is removed from the calculation, the utilization rate climbs to 86 percent. Gasoline production rose nearly 400 thousand B/D from March levels and about 150 thousand B/D above last April's production.

(In millions of B/D)	APRIL ESTIMATES			YEAR-TO-DATE ESTIMATES		
	1986	1985	% Change	1986	1985	% Change
—Total supply	16.5	16.5	0.2	16.5	15.7	5.6
—Crude production ^{2/}	8.8	9.0	(1.9)	8.9	8.9	(0.1)
—Crude oil imports ^{3/4/}	3.7	3.3	12.4	3.3	2.7	22.9
—Product imports	1.7	1.9	(8.7)	1.8	1.8	(1.4)

1/ Total supply, i.e., production plus imports adjusted for net stock change is equal to total products supplied from primary storage. Total products supplied from primary storage less exports is equal to total domestic products supplied. Information contained in this report is derived from information published in the API Weekly Bulletin and is based on historical analysis of the industry. All data reflect the most current information available to the API and include all previously published revisions.

2/ Includes lease condensate.

3/ Beginning with January 1977, the U.S. Department of Energy began reporting crude oil imports as of the date of importation. Previously, this data, with the exception of Canadian crude imports, was reported as of the date it was received at the refinery. This change may affect both the level of crude oil imports and crude oil stocks. API estimates of these data may, therefore, differ slightly from those of the U.S. Department of Energy.

4/ API data do not include crude oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR (according to the U.S. Department of Energy, the SPR held approximately 499 million barrels as of April 30, 1986).

ESTIMATED UNITED STATES PETROLEUM BALANCE

(Daily Average in Thousands of 42 Gallon Barrels)

Products Supplied/Supply From Primary Storage	APRIL			YEAR-TO-DATE		
	1986 ¹	1985 ²	% Change	1986 ^{3R}	1985 ²	% Change
Products Supplied:						
Total motor gasoline	7,127	6,931	2.8	6,774	6,604	2.6
Finished leaded motor gasoline*	2,277	2,554	(10.8)	2,174	2,443	(11.0)
Finished unleaded motor gasoline*	4,850	4,377	10.8	4,600	4,161	10.6
Naphtha-jet	215	245	(12.2)	207	213	(2.8)
Kerosine-jet	1,004	973	3.2	1,040	958	8.6
Distillate fuel oil	2,756	2,767	(0.4)	3,203	3,149	1.7
Residual fuel oil	1,330	1,133	17.4	1,362	1,304	4.4
All other oils ⁴	3,713	3,539	4.9	3,855	3,681	4.7
Reclassified ⁵	- 312	- 243	28.4	- 372	- 216	72.2
Total domestic products supplied	15,833	15,345	3.2	16,069	15,693	2.4
Exports	882	764	15.4	885	775	14.2
Total products supplied	16,715	16,109	3.8	16,954	16,468	3.0
Supply:						
Domestic production:						
Crude oil ⁶	8,791	8,959	(1.9)	8,873	8,881	(0.1)
Natural gas liquids	1,674	1,600	4.6	1,683	1,621	3.8
Other supply ⁷	671	784	(14.4)	954	719	32.7
Total domestic supply	11,136	11,343	(1.8)	11,510	11,221	2.6
Imports:						
Crude oil, total	3,701 ^{10/}	3,293 ^{10/}	12.4	3,257 ^{10/}	2,650 ^{10/}	22.9
Canadian	576	556	3.6	528	470	12.3
Other	3,125	2,737	14.2	2,729	2,180	25.2
Products, total	1,690	1,851	(8.7)	1,774	1,800	(1.4)
Residual fuel oil	520	422	23.2	572	530	7.9
Other	1,170	1,429	(18.1)	1,202	1,270	(5.4)
Total imports	5,391	5,144	4.8	5,031	4,450	13.1
Total supply	16,527	16,487	0.2	16,541	15,671	5.6
Stock change, all oils	- 188	+ 378	XXXX	- 413	- 797	XXXX
Refinery Operations						
Input to crude oil distillation units	12,630	11,966	5.5	12,282	11,637	5.5
Operable capacity	15,511	15,686	(1.1)	15,581	15,583	-
Refinery utilization (%) ⁸	81.4%	76.3%	6.7	78.8%	74.7%	5.5
Crude oil runs	12,390	11,817	4.8	12,084	11,518	4.9
Stocks						
(millions bbls.)	1986		1985 ²	% Change from ...		
	Apr. 30 [*]	Mar. 31 [*]		Previous Month	Year Ago	
Crude oil ^{10/}	337.3	340.2 ^{R/}	341.8	(0.9)	(1.3)	
Unfinished oils	110.1	102.0 ^{R/}	113.2	7.9	(2.7)	
Total motor gasoline**	206.6	220.3 ^{R/}	216.6	(6.2)	(4.6)	
Finished leaded motor gasoline*	65.0	72.2	77.7	(10.0)	(16.3)	
Finished unleaded motor gasoline*	108.8	113.2 ^{R/}	104.4	(3.9)	4.2	
Naphtha-jet	6.3	6.0	6.2	5.0	1.6	
Kerosine-jet	39.5	40.4	35.5	(2.2)	11.3	
Distillate fuel oil	96.2	95.7	97.1	0.5	(0.9)	
Residual fuel oil	36.5	39.2	46.6	(6.9)	(21.7)	
All other oils	141.1	135.4 ^{R/}	152.0	4.2	(7.2)	
Total all oils	973.6	979.2 ^{R/}	1,009.0	(0.6)	(3.5)	

1/ Based on API estimated data converted to a monthly basis.

2/ Source: U.S. Department of Energy.

3/ Source: January-February, U.S. Department of Energy, March-April, API.

4/ Includes crude losses.

5/ Beginning with January 1981, U.S. Department of Energy began using a new data collection system which encompasses a method to ascertain the amount of product reclassified during the production phase. So that there will be no double counting of these volumes, they are subtracted from total domestic products supplied.

6/ Includes lease condensate.

7/ Includes unaccounted-for crude oil, refinery input of other hydrocarbons, and processing gain.

8/ Represents "Input to crude oil distillation units" as a percent of "Operable capacity."

9/ Derived by interpolating API weekly stocks data.

10/ Data do not include oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR.

R/ Revised.

* Included in motor gasoline.

** Includes finished leaded, finished unleaded, and motor gasoline blending components stocks.